

Python 3G

Multichannel Fiber Optic HD-SDI Transport System with CWDM Multiplexing



Lightweight, easy-to-deploy fiber connectivity solutions.

The Python 3G from Grass Valley, a Belden Brand, is your answer to lowering the cost of digital video distribution, simplifying your cable plant and eliminating all concerns about distance, interference and grounding.

The Python 3G converts up to two groups of 8-channels of HD-SDI to fiber optic transport, all in a compact 1 RU frame. Select a transmitter and a receiver frame for eight or 16 channels, for example, in one direction. Select two transceiver frames for eight channels in each direction.

In addition, Python 3G uses CWDM optical multiplexing options to carry up to 16 HD signals on a single optical fiber.

The Python 3G offers the industry's broadest range of digital transmission rates while maintaining the quality that broadcasters demand. It supports numerous interface standards, including applicable SMPTE, ATSC and DVB recommendations.

No matter what your format, from 19.4 Mb/s to 3 Gb/s, the Python 3G allows you to implement it.

- 143 Mb/s NTSC composite
- 177 Mb/s PAL composite
- 270 Mb/s serial component
- DVB/ASI
- 360 Mb/s serial component and compressed HD
- 540 Mb/s proprietary

Python 3G Multichannel Fiber Optic HD-SDI Transport System with CWDM Multiplexing

KEY FEATURES

- Economical, low profile packaging
- 4 to 16 channels per 1 RU
- Wide range of digital formats
- 19.4 Mb/s to 3 Gb/s transport
- Compatible with digital TV standards SMPTE 292M, 259M and 424M
- Handles DVB/ASI signals
- Immune to pathological data errors
- Equalizes coax up to 3 Gb/s
- BNC I/O
- Wide optical budget
- Low system jitter
- Low power consumption
- High reliability, durable design
- CWDM multiplexing options
- Compatible with other Telecast Series HD/SD-SDI transport systems

SPECIFICATIONS

Video

Transmission method: Digital

Input level: 800 mV p-p

I/O impedance: 75Ω

Return loss:

>15 dB, 5 MHz – 1.5 GHz

>10 dB, 1.5 GHz – 3 GHz

Coaxial input equalization:

Maximum rate: 3 Gb/s

Equalization at 3 Gb/s: 120m (393 ft.) of Belden 1694A

Bit-error rate at -22 dBm Rx optical power: 10-12

Jitter (using pathological data pattern): <0.2 UI

Electro-Optical

Operating wavelength: 1310 nm or 1550 nm, optional CWDM available

Link margin: Up to 22 dB

Transmitter output power options: -7 dBm

Receiver sensitivity: -20 dBm

Optical source: Laser diode

Optical detector: PIN

Fiber type: Single-mode

Mechanical/Environmental

Dimensions (W x H x D): 266.7 x 44.45 x 424.18 mm (10.5 x 1.75 x 16.7 in.)

Weight, each end: 2.27 kg (5 lbs.)

Connectors: Electrical: BNC

Optical: ST

Input voltage: 12 – 24 VDC

Power consumption: <15W

Indicators: Power On, SDI data presence, optical power

Temperature range: -20° to 55° C (-4° to 131° F)

Humidity range: 0 to 95% non-condensing

ORDERING

Integrated CWDM Models

PY3-GH-W8	8 channel transmitter, 1 fiber
PY3-RR-W8	8 channel receiver, 1 fiber
PY3-GHJK-W16	16 channel transmitter, 1 fiber
PY3-RRRR-W16	16 channel receiver, 1 fiber
PY3-GHRR-W8W8	8 channels each way, 2 fibers

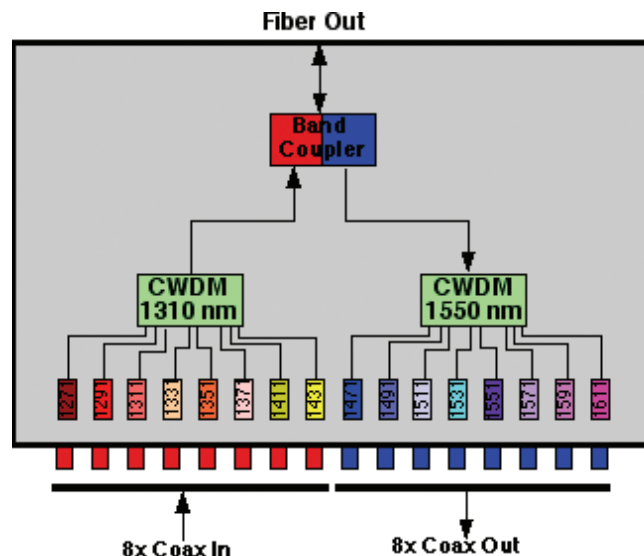
Bundled Systems

PY3-GHRR-W16	(Used together with) 8 channels each way, 1 fiber
PY3-JKRR-W16	8 channels each way, 1 fiber

The above two units are used together to create a single transport system.

Power Supply (required for all units)

ADAP-AC-04	120/240V to 15 VDC, 4A, 4-pin XLRP
------------	------------------------------------



Python 3G Multichannel Fiber Optic HD-SDI Transport System with CWDM Multiplexing



Python 3G Multichannel Fiber Optic HD-SDI Transport System with CWDM Multiplexing

